

Air Quality and Dust Monitoring Monthly Report – January 2023

West Northamptonshire District Council



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by EWCs and MWCCs on behalf of HS2 Ltd.

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Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of dust monitoring undertaken in the West Northamptonshire (WNDC) during January 2023.
- 1.1.2 Figures 1 and 2 in Appendix A present the current worksites together with the dust monitoring locations for January 2023.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current worksites as presented in Appendix A, Figures 1 and 2, include:

Twyford to Greatworth

Radstone and Hall Farm:

- Topsoil Stripping
- Site Access Road Maintenance
- Compound Maintenance
- Drainage and temporary ponds
- Utilisation of haulage road
- Structures compound set-up and aggregate stockpiling
- Surfacing of Site Access Road (SAR).

Greatworth Hall:

- Topsoil Stripping
- Stockpile Management
- Site Access Road Maintenance
- Drainage and Temporary Ponds
- Maintenance and utilisation of Site Access Road.

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Chipping warden – Ramac:

- A361 temporary overbridge
- Site Access Road maintenance
- Utilisation of haulage road for moving material

- Chipping warden batching plant
- Appletree lane utility diversion
- General maintenance
- Hydro-demolition
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance

CW Village:

- A361 temporary overbridge
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Chipping warden batching plant
- Appletree lane utility diversion
- General maintenance
- Hydro-demolition
- Stockpile management
- Vegetation maintenance
- Site Access Road maintenance
- Compound maintenance

Lower Boddington:

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Vegetation maintenance
- Highfurlong brook viaduct
- Bulk excavation – cutting

Highfurlong brook Viaduct:

- Platform maintenance;
- Crane platform maintenance + FRC works.

Fir tree nursery:

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance

- Vegetation maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds

Greatworth Village:

- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds

Lower Thorpe:

- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds
- Lower Thorpe pilling works

Blackgrounds:

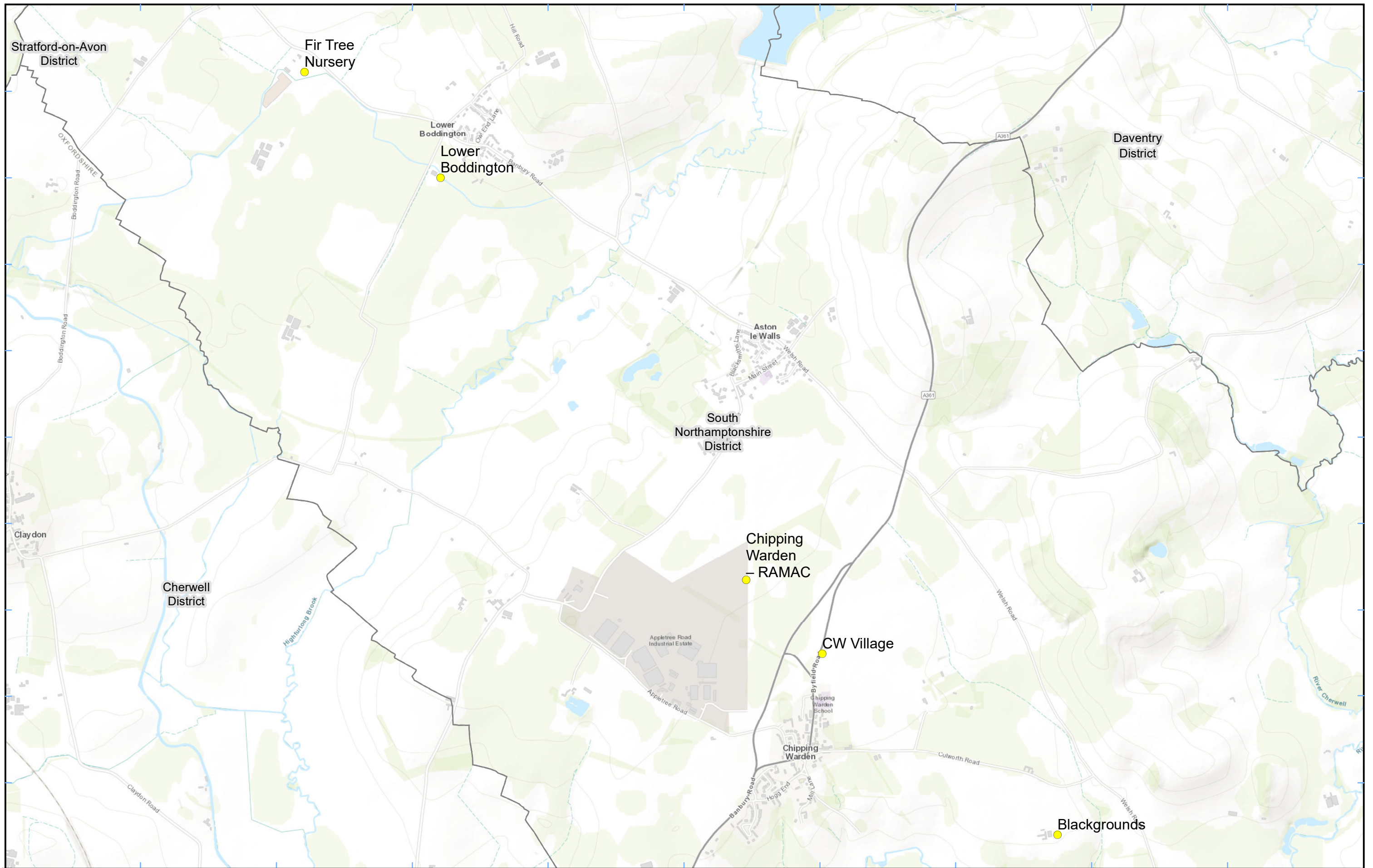
- Topsoil stripping
- Stockpile management
- Site Access Road maintenance
- Vegetation maintenance
- Utilisation of haulage road for moving material
- Drainage and temporary ponds

- 1.1.5 Ten (10) dust monitors are installed at the worksites, where works are underway. These sites returned a medium dust risk rating.
- 1.1.6 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites - (October 2018)*' has been applied.
- 1.1.7 Dust monitoring locations and results are presented in Appendix B, Table 2, together with line charts of monthly data from the dust monitor presented in Figure 3. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigation.

- 1.1.8 The trigger level for PM₁₀ concentrations of 190 µg/m³, over a 1-hour period, in accordance with the updated guidance document '*Guidance on Monitoring in the Vicinity of Demolition and Construction Sites - (October 2018)*' has been applied.
- 1.1.9 No (0) dust trigger alerts were recorded during the monitoring period (January 2023).
- 1.1.10 Data capture is below 90% for multiple monitors due to lack of solar charge and the Fir Tree Nursery monitor had a sim repair.
- 1.1.11 No (0) complaints were received during the reporting period.

Appendix A –Monitoring Locations

Figures 1 and 2: Worksite and Monitoring locations within the WNDC



Legend

- Dust
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In WNDC (Sheet 1)**

West Northamptonshire Council

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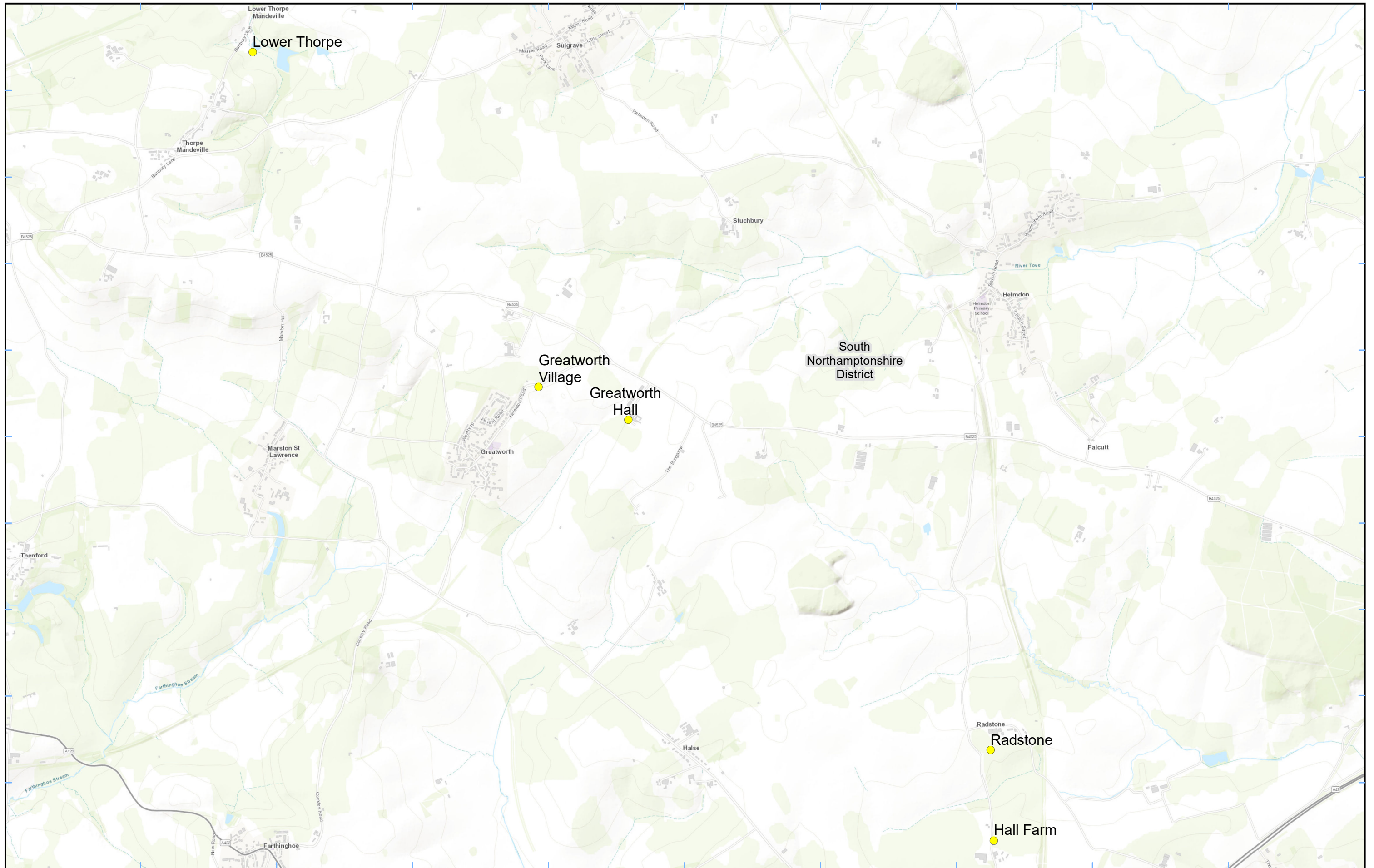
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0 180 360 540 720
Metres

Doc Number:

Date: 31/10/22



Legend

- Dust
- District Borough Unitary Boundaries

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Map Number

Map Name
**Monitoring Locations
In WNDC (Sheet 2)**

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Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and January 2022 Results

Monitoring site ID	Coordinates (X,Y)	Location description	Dust risk rating for site	Monitoring site active during period	Change to site since previous period report	Mean 1-hour PM ₁₀ concentration (µg/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	Number of 1-hour periods exceeding trigger level of 190 µg/m ³	1-hour data capture (%)
Chipping Warden – RAMAC	449600, 249755	Chipping Warden, West Northamptonshire	M	Yes	Yes	6.9	1.0	40.0	0	67.5
CW Village	450000, 249367	Chipping Warden, West Northamptonshire	M	Yes	Yes	7.8	1.0	39.0	0	91.4
Lower Boddington	447997, 251865	Lower Boddington, West Northamptonshire	M	Yes	Yes	8.0	1.0	36.0	0	86.8
Fir Tree Nursery	447283, 252421	Fir Tree Nursery, West Northamptonshire	M	Yes	Yes	6.8	1.0	30.0	0	47.6
Radstone	458712, 240454	Radstone Road, Brackley, West Northamptonshire	M	Yes	Yes	9.2	2.0	27.0	0	10.2
Hall Farm	458734, 239823	Hall Farm, Radstone Road	M	Yes	Yes	9.4	1.0	30.0	0	56.6
Greatworth Village	455551, 242992	Greatworth Village, Helmdon Road,	M	Yes	Yes	7.8	1.0	35.0	0	99.2
Lower Thorpe	453553, 245334	Banbury Lane, Lower Thorpe	M	Yes	Yes	7.7	1.0	35.0	0	92.2
Greatworth Hall	456179, 242763	Greatworth Hall, Greatworth	M	Yes	Yes	8.1	1.0	33.0	0	71.8
Blackgrounds	450846, 248413	Blackgrounds, West Northamptonshire	M	Yes	Yes	11.5	1.0	45.0	0	40.3

Figure 3: Continuous dust 1-hour mean indicative PM₁₀ concentration for all dust monitors

